INTERNATIONAL JOURNAL ON ORANGE TECHNOLOGIES
www.journalsresearchparks.org/index.php/IJOT e- ISSN: 2615-8140|p-ISSN: 2615-7071
Volume: 02 Issue: 10 | OCT 2020

Risk factors and background diseases in different variants of ischemic stroke in the elderly and senile age

[1]Asadullaev Maksud, [2]Vakhabova Nargiza, [3]Asadullaev Hamidjon
[1,2,3]Tashkent medical Academy, Uzbekistan
E-mail: asadullaev_m@umail.uz

Abstract - *gender differences in risk factors and background diseases in elderly and senile individuals with ischemic stroke were established. Thus, it was found that senile individuals showed a decrease in the proportion of hemodynamic and lacunar stroke due to an increase in the percentage of patients with atherothrombotic stroke among both women and men. Risk factors for ischemic stroke also had their own characteristics and differed depending on age and gender. Taking into account the heterogeneity of stroke in individuals aged 44-59 years, the highest percentage (p<0.05) of Smoking, dyslipidemia (P<0.05), and psych emotional stress (p<0.05) was revealed. In elderly and senile patients, the Smoking factor significantly decreases (P<0.05). In individuals aged 44-59 years, there was a significant prevalence of atherosclerosis, arterial hypertension, CHD, TIA, rheumatism in men (p<0.05), and diabetes mellitus and heart rhythm disorders in women (p<0.05). At the same time, the prevalence of the specific weight of CHD and TIA in the structure of background diseases remained in elderly men (p<0.05).*

Keywords*: gender characteristics, risk factors and age.*

1. INTRODUCTION

Cerebrovascular pathology occupies a leading place among the main causes of death and is the leading cause of disability in the population, which defines it as one of the most important medical and social problems [1, 6, 7, 8, 10].

Post-secondary disability ranks first among all causes of disability [4, 5, 9]. This is associated with significant damage to the economy, which necessitates the most thorough study of this problem and creates prerequisites for the development of the highest quality timely prevention and treatment of stroke [3, 12].

To implement one of the priority tasks of modern angioedrology - the study of systems and factors that contribute to early diagnosis, identification of predictors of outcome and recovery after stroke [2, 11, 13], it is also necessary to describe the risk factors for stroke development in various population groups.

2. OBJECTIVE

To identify and study the features of risk factors and background diseases in elderly and senile individuals with ischemic stroke.

3. MATERIALS AND METHODS

the prospective study included 173 patients with ischemic stroke (AI) of average (34.1%; 44-59 years), elderly (63.8%; 60-74 years) and senile (12.1%; (75-90 years)) age from 44 to 87 years who were treated in the 2nd clinic of the Tashkent medical Academy (table 1)

Table 1. Demographic characteristics of the examined patients

Age	Men		Women		Total	
	Ab.	%	Ab.	%	Ab.	%
44-59 years	36	61,0*	23	39,0	59	34,1
60-74 years	58	62,4*	35	37,6	93	53,8
75-90 years	6	28,6*	15	71,4	21	12,1
Subtotal	100	57,8	73	42,2	173	100,0

Note: * - data confidence between male and female (P<0.05)

The average age was 63.2±0.76 years, including 73 women (42.2%) and 100 men (57.8%).

All patients underwent a comprehensive clinical, laboratory, and neuroimaging examination. It was complex and included somatic, neurological and

INTERNATIONAL JOURNAL ON ORANGE TECHNOLOGIES
www.journalsresearchparks.org/index.php/IJOT e- ISSN: 2615-8140|p-ISSN: 2615-7071
Volume: 02 Issue: 10 | OCT 2020

neurophysiological examinations, ECG in dynamics, chest x-ray, clinical and biochemical blood tests, urine analysis; according to indications, ultrasound of the abdominal cavity and kidneys were performed.

4. RESULTS

Among individuals aged 44-59 years, atherothrombotic stroke (ATS) accounted for 49.2% (29 patients), cardio embolic stroke (CES) - 16.9% (10 patients), lacunar stroke (LS) - 20.3% (12 patients), hemodynamic stroke (HS) - 13.6% (8 patients). ATS prevailed in all age groups, LS was the second most frequent in the elderly, CES and HS were the third, and LS gave way to CES in the elderly, which indicates an increase in cardiac pathology with age (Fig. 2).

Among men aged 44-59 years and 60-74 years, there was a significant (P<0.05) prevalence of ATI (p<0.05), which was 65.6% and 66.7%, respectively, compared with 21.9% and 31.1% of ATI observations in women (table 1).

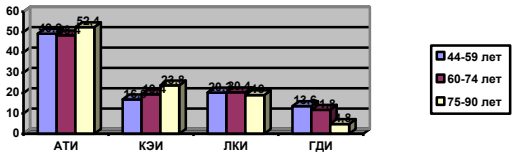


Figure 2. *distribution of the examined patients depending on the pathogenic type of ischemic stroke according to age gradation*

In senile individuals, a decrease in the proportion of HS and LS was noted due to an increase in the percentage of patients with ATS to 52.4% and 73.0%, respectively, among men and women. CES was equally common in men and women in all age groups, which makes it possible to neutralize the tender factor of its occurrence.

Taking into account the heterogeneity of stroke in people aged 44-59 years, the highest percentage (p<0.05) of the Smoking factor (66.1%; 39 patients), dyslipidemia (62.7%; 37 patients), and psych emotional stress (45.8%; 27 patients) (p<0.05) was revealed. In elderly and senile patients, the Smoking factor significantly decreases (P<0.05).

The pathogen etic effect of tobacco smoke on the brain is associated with the effect on vascular tone and blood pressure [3], violation of hem rheological parameters, and early and rapid development of atherosclerosis with the formation of extra cranial vascular stenosis [5]. Smoking causes a violation of metabolism (a shift in the acid-base state towards acidosis) and microcirculation (due to a disorder of cerebrovascular reactivity). These changes develop earlier than hemodynamically significant atherosclerotic lesions of the arteries and are manifested regardless of the presence or absence of atherosclerotic vascular changes, atherogenic shifts in lipid metabolism, violations of free radical processes and platelet aggregation.

In elderly patients, hypodynamia, overweight, and dyslipidemia prevailed (p<0.05) in the absence of clear tender differences. Data from other authors indicate that when three of the five risk factors are present, the probability of stroke increases 8-fold [6], and a combination of more than three risk factors is significantly more common in elderly patients (57.0%; 53 patients), compared with patients aged 44-59 years (37.3%; 22 patients).

The prevalence of arterial hypertension (91.5%; 54 patients), the presence of atherosclerosis (86.4%; 51 patients), heart rhythm disorders and rheumatism (45.8 and 47.5%, respectively), diabetes mellitus (23.7%; 14 patients) was revealed in patients aged 44-59 years in the structure of background diseases. Transient ischemic attacks (TIA) and ischemic heart disease (CHD) in individuals aged 44-59 years occurred in 18.6% of cases (11 patients). There was a significant prevalence of atherosclerosis, arterial hypertension, CHD, TIA, rheumatism in men (p<0.05), and diabetes mellitus and heart rhythm disorders in women (p<0.05).

In patients without a clinical diagnosis of arterial hypertension, who are in the acute period of stroke, ultrasound dopplerography revealed indirect signs of the disease in the form of an increase in the tone of brain vessels. This is especially true for women under 59 years of age. UZDG signs of atherosclerosis in the form of a decrease in the elastic properties of brain

vessels and a decrease in tone indicators were observed in men over 44 years of age.

With age, the percentage of arterial hypertension increased due to an increase in the proportion of atherosclerosis (p<0.05), the proportion of IHD, TIA, and heart rhythm disorders increased. There was a leveling of tender differences in the structure of background diseases due to an increase in the specific weight of atherosclerosis in women (p<0.05), and diabetes mellitus in senile men (p<0.05). At the same time, the prevalence of the specific weight of CHD and TIA in the structure of background diseases remained in elderly men (p<0.05).

5. CONCLUSIONS

- Among people aged 44-59 years, atherothrombotic stroke (ATI) accounted for 49.2% (29 patients), cardio embolic stroke (CEI) - 16.9% (10 patients), lacunar stroke (LKI) - 20.3% (12 patients), hemodynamic stroke (GDI) - 13.6% (8 patients). ATI prevailed in all age groups, LKI was the second most frequent in the elderly, KEI and GDI were the third, and LKI gave way to KEI in the elderly, which indicates an increase in cardiac pathology with age.
- Among men aged 44-59 years and 60-74 years, there was a significant (P<0.05) prevalence of ATI (p<0.05), which was 66.1% and 66.7%, respectively, compared with 21.9% and 31.1% of ATI observations in women.
- In AI, men aged 44-59 years showed a predominance of risk factors in the form of Smoking (66.3%), dyslipidemia (62.1%), psych emotional stress (45.3%), and women - overweight (40.6%) and psycho-emotional stress (62.5%). In elderly patients, hypodynamia (48.1%), overweight (51.9%), dyslipidemia, and combined risk factors (68.5%) prevailed, while gender differences were smoothed out.
- With age, the percentage of arterial hypertension increased due to an increase in the proportion of atherosclerosis (p<0.05), the proportion of IHD, TIA, and heart rhythm disorders increased. There was a leveling of tender differences in the structure of background diseases due to an increase in the specific weight of atherosclerosis in women (p<0.05), and diabetes mellitus in senile men (p<0.05).

REFERENCES:

[1] Gusev E. I., Skvortsova V. I. Stroke in the Russian Federation // journal of neurology and psychiatry named after S. S. Korsakov. — 2007. Special issue-P. 7-12.

[2] Zhulev N. M., Golovkin V. A., Dementieva L. N. Clinical and morphological features of cerebral strokes in elderly and senile people: a textbook for doctors, St. Petersburg: SPbMAPO publishing house, 2009. – 145 p.

[3] Ivanov Yu. S. pathogenetic aspects of vascular brain failure / Yu. S. Ivanov, A. A. Mikhailenko, G. F. Semin //Seventh all-Russian Congress of neurologists-N. Novgorod, 2011. — P. 229.

[4] Levin O. S. diagnostics and treatment of dementia in clinical practice. – Moscow: Medpress-inform, 2010. – 255 p.

[5] Privalova M. A. the role of atrial fibrillation in the development and course of ischemic stroke in elderly and senile people // Current issues of the clinic, diagnosis and treatment of diseases in veterans of the great Patriotic war / Ed. by E. M. Ageenko. 3rd ed., reprint. St. Petersburg: Beresta, 2010, pp. 410-413.

[6] Skvortsova V. I., Evzelman M. A. Ischemic stroke. Orel, 2006.-P. 401.

[7] Suslina Z. A. Antithrombotic therapy of ischemic disorders of cerebral circulation. – M., 2009. – 213 p.

[8] Suslina Z. A., Tanyashyan M. M.,. Ionova B. G. Ischemic stroke: M. Med. book, 2005. 205 p.

[9] Baker, D.J., Wijshake, T., Tchkonia, T., LeBras- seur, N.K., Childs, B.G., van de Sluis, B., Kirkland, J.L., and van Deursen, J.M. (2011). Nature 479, 232–236.

[10] Suliman A., Greenberg J., Chandra A. Carotid endarterectomy as the criterion standard in high-risk elderly patients // Arch Surg. – 2008. – vol.143. – P. 736-742.

[11] Sundseth A., Faiz K.W., Ronning O.M. Factors Related to Knowledge of Stroke Symptoms and RiskFactors in a Norwegian Stroke Population. //J Stroke Cerebrovasc Dis. - 2014 May 6. – vol. 14. - p.1052-3057.

[12] Wolfe C. Incidence of Stroke in Europe at the Beginning of the 21st Century. // The European Registers of Stroke (EROS) Investigators. Stroke. – 2009. - vol.40. – P.1557-1562.

[13] Won SJ, Xie L, Kim SH, Tang H, Wang Y, Mao X, et al. Influence of age on the response to fibroblast growth factor-2 treatment in a rat model of stroke. // Brain Res. – 2006. – vol.1123(l),. – P. 237-244.